

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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|------------------|---|-------------------|-----------|
| Applicant: | Jordan COHEN et al. | Confirmation No.: | 5522 |
| Application No.: | 10/725,673 | Art Unit: | 2618 |
| Filed: | December 3, 2003 | Examiner: | M. D. Dao |
| Title: | PROVIDER-ACTIVATED SOFTWARE FOR MOBILE COMMUNICATION DEVICES | | |

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

As required under § 41.37(a), this brief is filed in this case on June 10, 2010 and is in furtherance of the previously filed Notice of Appeal.

The fees required under § 41.20(b)(2), and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is:

Voice Signal Technologies, Inc., which is a wholly-owned subsidiary of Nuance Communications, Inc., 1 Wayside Road, Burlington, MA 01803

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 23 claims pending in application.

B. Current Status of Claims

1. Claims canceled: 2-3, 6-8, 10, 12, 15, 17, 29, and 32-45.
2. Claims withdrawn from consideration but not canceled: None.
3. Claims pending: 1, 4-5, 9, 11, 13-14, 16, 18-28, 30-31, and 46-47.
4. Claims allowed: None.
5. Claims rejected: None.

C. Claims On Appeal

The claims on appeal are claims 1, 4-5, 9, 11, 13-14, 16, 18-28, 30-31, and 46-47.

IV. STATUS OF AMENDMENTS

We are submitting an amendment along with this Appeal Brief to correct a typographical error that went undetected until now. More specifically, the last line of claim 16 recites "a digital activation key,". It should read "a digital deactivation key." We previously made arguments on the assumption that the last line referred to a digital deactivation key rather a digital activation key. Also, it is apparent from the claims that the reference to a digital activation key should have been a reference to a digital deactivation key. Moreover, it appears that the examiner also understood it to refer to a digital deactivation key.

All other amendments that had previously been submitted have been accepted.

Appendix A presents the pending claims including all amendments that have been accepted as well as the proposed amendment accompanying this Appeal Brief.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The described embodiment is a cellular phone in which there is embedded application software that includes functionality that can be turned on and off remotely (e.g. by the carrier or service provider). In the described example, the application software is voice recognition software that enables the user to access information on the phone (e.g. telephone numbers of identified persons) and to control the cell phone through verbal commands. The voice recognition software also includes enhanced functionality in the form of a speech-to-text function that enables the user to enter text into an email message through spoken words. The enabling and disabling of the enhanced functionality within the speech recognition software is controlled by a software switch. The carrier is able to turn on or turn off the software switch and thereby enable or disable the speech-to-text functionality by sending a special “key” to the user’s cell phone. (Page 4, lines 10-20).

The cellular phone with the remotely switchable enhanced functionality underlies a revenue-generating model for providing services to cell phone users. In essence, the enabling of software functionality that is embedded on the user’s cellular phone becomes a revenue-generating event. For the enhanced functionality that is enabled by the carrier, the user agrees to pay a monthly charge for so long as that functionality remains activated. The carrier collects the income stream generated by enabling the new functionality and shares a portion of that income with the entity which provided the software. This enables the software company to more equitably share in the financial rewards made possible by the software which the company designed for the phone. (page 4, lines 21-29).

The voice recognition application includes code for its basic functionality as well as code for enhanced functionality, which in this case is speech-to-text functionality. The activation and/or deactivation of the speech-to-text functionality is controlled by the software switch. (page 5, line 31 to page 6, line 3).

When the speech-to-text functionality is activated, the user is able to use that functionality to generate short text messages by speaking into the phone. The user's spoken word is converted to text that is inserted into the body of a short text message. Once the text message is completed and properly addressed, it is then sent to the intended recipient by using, for example, the SMS messaging capabilities of the smartphone. (page 6, lines 4-8).

The software switch is operated by a digital "key" that is supplied, typically by the carrier or service provider. The key is a password or encryption key that the locally stored application in the cell phone uses to activate or deactivate the enhanced functionality. In other words, the application program includes code that uses the key which it receives to either activate or deactivate the enhanced functionality, depending on the particular key that is supplied. (page 6, lines 9-13).

There is a broader range of enhancements that could be implemented in the speech recognition area other than the speech-to-text example mentioned above. Other examples include natural language functionality or extended word recognition dictionaries. The natural language functionality enables the user to issue phone operating commands using normal spoken language instead of having to know particular commands for the desired functions. In the case of extended word recognition dictionaries, the phone can be delivered with a more limited dictionary that is used as the active dictionary and an extension to that dictionary that is present but deactivated. The more limited dictionary limits the user to a more limited set of spoken words. The enhanced dictionary, when activated, expands the spoken word vocabulary that is available to the user in communicating with the phone. (page 9, line 30 to page 10, line 9).

Claims 1, 14, and 16 are presented in the following tables which map the recited elements to the relevant portions of the specification and figures:

| Features of Claim | Support in Specification |
|---------------------------------|--|
| 1. A cellular phone comprising: | block 100 in Fig. 1 page 4, line 30 |

| Features of Claim | Support in Specification |
|--|---|
| a wireless transceiver circuit for transmitting and receiving voice communications and for receiving data; | block 108 in fig. 1 page 5, line 8 |
| a digital processor; and | block 102 in Fig. 1 page 5, line 2 |
| a memory storing application program code which when executed on the digital processor causes the cellular phone to provide predetermined functionality to the user of the cellular phone, wherein said predetermined functionality is speech recognition, | blocks 118, 124 and 126 in Fig. 1 page 5, lines 12-19 page 4, lines 13-14 |
| said predetermined functionality having basic features and having enhanced features that are in addition to the basic features, | page 4, lines 15-18 page 5, line 31 to page 6, line 2 |
| said application program code including a software switch for toggling back and forth between a first state and a second state, wherein the first and second states represent a deactivated state in which the cellular phone provides said basic features to the user without providing said enhanced features and an activated state in which the cellular phone provides the enhanced features, and | page 6, lines 2-3 page 6, line 10-15 |
| wherein toggling from the first state to the second state is accomplished by receiving through the wireless transceiver circuit a transmitted key that was sent by a remote | page 6, lines 10-15 page 7, lines 8-10 |

| Features of Claim | Support in Specification |
|--------------------------------|--------------------------|
| source to that cellular phone. | |

| Features of Claim | Support in Specification |
|---|--|
| 14. A method for generating revenue comprising: | page 6, lines 16-10 |
| establishing an account for each of a plurality of cellular phones, wherein on each of said cellular phones there is an application program for providing predetermined functionality for that cellular phone, wherein said predetermined functionality is speech recognition, said predetermined functionality having basic features and also having enhanced features that are in addition to the basic features, | page 6, lines 25-27 page 5, line 29 to page 6, line 2 |
| said application program including a software switch for toggling back and forth between a deactivated state in which the cellular phone provides the basic features to a user of the phone without providing the enhanced features and an activated state in which the cellular phone provides the enhanced features; | page 6, lines 2-3 page 6, lines 10-15 |
| selecting one of the plurality of cellular phones on which to switch the application | page 6, lines 25-29 |

| Features of Claim | Support in Specification |
|---|---|
| program from the deactivated state to the activated state; | |
| transmitting an activation key to the selected, said activation key for causing the application program in the cellular phone to switch from the deactivated state to the activated state; | page 6, lines 25-29 page 7, lines 11-15 block 210 in Fig. 2 |
| after the enhanced features are activated in the selected phone, billing the account for that phone for the enhanced features; and | page 7, lines 15-20 block 212 in Fig. 2 |
| at some later time after activating the enhanced features in the selected phone, transmitting a deactivation key to the selected phone for causing the application program in the cellular phone to switch from the activated state to the deactivated state. | page 7, lines 28-30 block 218 in Fig. 2 |

| Features of Claim | Support in Specification |
|---|--|
| 16. A method comprising: | |
| providing voice recognition software embedded within a mobile communication, the embedded software including a basic functionality enabling a user of the phone to verbally control at least one operation thereof; | page 4, lines 13-14 |
| activating an enhanced functionality of the embedded software in response to a digital | page 6, lines 10-15 page 7, lines 11-15 |

| Features of Claim | Support in Specification |
|--|--------------------------|
| activation key, the enhanced functionality including a natural language capability further facilitating verbal control of the phone; and | page 10, lines 1-4 |
| deactivating the enhanced functionality of the embedded software in response to a digital deactivation key. | page 7, lines 28-30 |

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

§103(a) Obviousness Rejection:

The examiner rejected claims 1, 4, 5, 9, 11, 13, 14, 16, 18-28, 30, 31, 46, and 47 under 35 U.S.C. §103(a) as being unpatentable over U.S. 6,029,065 to Shah in view of U.S. 8,859,699 to Carroll et al. (Carroll) and further in view of U.S. 6,526,336 to Treyz et al. (Treyz).

The question is whether the combination of references teaches or suggests a cellular phone having speech recognition functionality including basic features and enhanced features and also having “a software switch for toggling back and forth between a first state and a second state, wherein the first and second states represent a deactivated state in which the cellular phone provides said basic features to the user without providing said enhanced features and an activated state in which the cellular phone provides the enhanced features.”

VII. ARGUMENT

Claim 1:

The Examiner admits that Shah does not disclose “activating and deactivating enhanced features through a wireless transceiver circuit and by a transmitted key that was sent by a remote source to that mobile communication device.” For this missing feature, the Examiner relies on Carroll and Treyz.

We agree that Carroll does indeed discuss a method according to which authorized users of his system must submit an activation code from the remote service provider before being able to access data or functionality downloaded from that service provider (see Abstract). Carroll's system is designed to prevent the distribution and use by unauthorized users of data and functionality obtained from the service provider. The most relevant disclosure includes the paragraphs identified by the examiner:

According to one embodiment, system security may be obtained by using activation codes to control distribution of the service data. An activation code is similar to a key to unlock the service data downloaded to automotive service systems. Only authorized users will be provided with an activation code. Without a valid activation code, even if the service data is properly downloaded, it cannot be properly installed on or used by the automotive service system. The activation code may be provided to customers when the automotive systems are shipped or obtained by telephone or e-mail when users subscribe to the service.

Activation codes can be used in conjunction with product codes to achieve higher system security. For instance, the remote service provider generates an activation code based on a product code submitted by a valid user. The activation code is then sent to the user for activating the downloaded service data. A software program that runs on the automotive service system will access the product code of the automotive service system and determine whether the product code of the automotive service system matches with the product code from which the activation code is generated. Unless a proper match is obtained, the activation code will not unlock the downloaded software. By this process, verification of identities of hardware and software is conducted. Thus, duplicates of downloaded service data and activation code cannot properly operate on other unauthorized automotive service systems, as a check of product codes would not generate a match. (Col. 7, line 60 to col. 8, line 9).

In other words, Carroll's activation code serves to turn on the functionality that the user downloaded. But there is no suggestion of a code which serves to turn off that functionality. Stated differently, **Carroll does not teach or even suggest the use of a software switch which enables toggling back and forth between activation and deactivation states.**

The examiner also admits that neither Shah nor Carroll mention multiple levels of speech recognition in the peripheral. So, the examiner relies on Treyz which he characterizes as disclosing "a software switch for toggling back and forth between first and second states." In treyz, the two states to which the examiner is referring are a native language capability and a foreign language capability.

We note, however, that the user of Treyz's automobile personal computer 14 selects the language that is to be used. Treyz says:

The user may direct automobile personal computer 14 to use different languages when using its voice-recognition and voice-synthesis capabilities. Illustrative steps involved in using automobile personal computer 14 to operate with different languages are shown in FIG. 96. At step 1038, the user may be provided with an opportunity to select a language to use for voice-synthesis operations (e.g., when reading text e-mail and the like) and to select a language to be used during voice control. (Col. 73, lines 48-56).

There is no suggestion to be found in Treyz that "toggling from the first state to the second state is accomplished by receiving through the wireless transceiver circuit a transmitted key that was sent by a remote source to that cellular phone," as recited in the claims.

It is true that Carroll does disclose sending an activation code. However, if a person of ordinary skill in the art were to use Carroll's activation code feature in connection with Shah's system as modified by Treyz, the result would be a device in which the activation code enables the user to turn on the voice synthesis and/or voice recognition functionality of the device. Though that functionality might also include the ability for the user to toggle between languages, there is no suggestion to use the activation code to perform that toggling or to switch from a first state to a second state. There is no suggestion or motivation to take control of the language feature out of the hands of the user and put it into the hands of the entity that distributed the activation code.

The examiner argues that "[i]t would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the above teaching of Treyz to Shah and Carroll in order to obtain a system as recited in claim 1 for the purpose of wirelessly providing user options (as taught by Carroll) to speak in their native language or foreign language as preferred when using the voice recognition function as taught by Treyz." However, the examiner has read more into Carroll than is actually present. Carroll does not teach or suggest "wirelessly providing user options." As pointed out above, Carroll teaches the use of an activation code to unlock downloaded software. That is not the same as providing user options, e.g. toggling between basic features and enhanced features of the downloaded software.

Claim 14:

Claim 14 includes limitations similar to those discussed above in connection with claim 1. In addition, claim 14 also recites “at some later time after activating the enhanced features in the selected phone, transmitting a deactivation key to the selected phone for causing the application program in the cellular phone to switch from the activated state to the deactivated state.” None of the references teach or suggest the use of a deactivation key of the type recited in this claim.

Claim 16:

Claim 16 includes limitations similar to those discussed above in connection with claim 1. In addition, claim 16 recites “activating an enhanced functionality of the embedded software in response to a digital activation key, the enhanced functionality including a natural language capability further facilitating verbal control of the phone; and deactivating the enhanced functionality of the embedded software in response to a digital deactivation key.” None of the references teach or suggest the use of a deactivation key of the type recited in this claim.

For at least the reasons stated above, we believe that the claims are in condition for allowance and therefore ask that they be allowed to issue.

VIII. CLAIMS

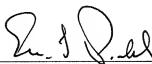
A copy of the claims involved in the present appeal is attached hereto as Appendix A.

Please apply any charges not covered, or any credits, to Deposit Account No. 08-0219, under Order No. 0112855.00112US3 from which the undersigned is authorized to draw.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-0219, under Order No. 0112855.00121US3 from which the undersigned is authorized to draw.

Respectfully submitted,

Dated: June 14, 2010

A handwritten signature in black ink, appearing to read "Eric L. Prahl", written over a horizontal line.

Eric L. Prahl
Registration No.: 32,590
Attorney for Applicant(s)

Wilmer Cutler Pickering Hale and Dorr LLP
60 State Street
Boston, Massachusetts 02109
(617) 526-6000 (telephone)
(617) 526-5000 (facsimile)

APPENDIX A

Claims Involved in the Appeal of Application Serial No. 10/725,673:

1. A cellular phone comprising:

a wireless transceiver circuit for transmitting and receiving voice communications and for receiving data;

a digital processor; and

a memory storing application program code which when executed on the digital processor causes the cellular phone to provide predetermined functionality to the user of the cellular phone, wherein said predetermined functionality is speech recognition, said predetermined functionality having basic features and having enhanced features that are in addition to the basic features, said application program code including a software switch for toggling back and forth between a first state and a second state, wherein the first and second states represent a deactivated state in which the cellular phone provides said basic features to the user without providing said enhanced features and an activated state in which the cellular phone provides the enhanced features, and wherein toggling from the first state to the second state is accomplished by receiving through the wireless transceiver circuit a transmitted key that was sent by a remote source to that cellular phone.

Claims 2-3. (Canceled)

4. The cellular phone of claim 1, wherein the transmitted key is an activation key that switches the application program code from the deactivated state to the activated state.

5. The cellular phone of claim 1 wherein the transmitted key uniquely identifies the selected phone among the plurality of cellular phones.

Claims 6-8. (Canceled).

9. The method of claim 14, further comprising:

prior to selecting one of the plurality of cellular phones on which to send the activation key, sending a message to the selected phone for notifying a user that the enhanced features are available after a trial period for a fee.

10. (Canceled).

11. The method of claim 14 wherein the activation key uniquely identifies the selected phone among the plurality of cellular phones.

12. (Canceled).

13. The method of claim 14, further comprising:

prior to selecting one of the plurality of cellular phones on which to activate the enhanced functionality, sending a message to that phone providing notification of the availability of the enhanced features for a fee.

14. A method for generating revenue comprising:

establishing an account for each of a plurality of cellular phones, wherein on each of said cellular phones there is an application program for providing predetermined functionality for that cellular phone, wherein said predetermined functionality is speech recognition, said predetermined functionality having basic features and also having enhanced features that are in addition to the basic features, said application program including a software switch for toggling back and forth between a deactivated state in which the cellular phone provides the basic features to a user of the phone without providing the enhanced features and an activated state in which the cellular phone provides the enhanced features;

selecting one of the plurality of cellular phones on which to switch the application program from the deactivated state to the activated state;

transmitting an activation key to the selected, said activation key for causing the application program in the cellular phone to switch from the deactivated state to the activated state;

after the enhanced features are activated in the selected phone, billing the account for that phone for the enhanced features; and

at some later time after activating the enhanced features in the selected phone, transmitting a deactivation key to the selected phone for causing the application program in the cellular phone to switch from the activated state to the deactivated state.

15. (Canceled)

16. A method comprising:

providing voice recognition software embedded within a mobile communication, the embedded software including a basic functionality enabling a user of the phone to verbally control at least one operation thereof;

activating an enhanced functionality of the embedded software in response to a digital activation key, the enhanced functionality including a natural language capability further facilitating verbal control of the phone; and

deactivating the enhanced functionality of the embedded software in response to a digital deactivation key.

17. (Canceled)

18. The method of claim 16, wherein the verbal control of the at least one operation enabled by the basic functionality comprises accessing telephone numbers stored in the cellular phone.

19. The method of claim 16, wherein the verbal control of the cellular phone facilitated by the natural language capability of the enhanced functionality enables the user to enter text into an email using spoken words.

20. The method of claim 16, wherein the verbal control of the cellular phone facilitated by the natural language capability of the enhanced functionality enables the user to verbally operate the device without requiring the user to know particular commands for desired phone functions.

21. The method of claim 16, wherein the verbal control of the at least one operation enabled by the basic functionality comprises performing proximate word recognition, and wherein the verbal

control of cellular phone facilitated by the natural language capability of the enhanced functionality comprises performing complete word recognition.

22. The method of claim 21, wherein at least a portion of the complete word recognition is performed on a remote server.

23. The method of claim 16, further comprising:
billing the user for the enhanced functionality in response to a transmission of the digital activation key to the cellular phone.

24. The method of claim 23, wherein the digital activation key is transmitted by at least one of a carrier and a service provider.

25. The method of claim 23, wherein the digital activation key corresponds to at least one of a password and an encrypted key.

26. The method of claim 16, wherein the enhanced functionality is activated by a carrier associated with the cellular phone.

27. The method of claim 16, wherein the enhanced functionality is available free of charge during a trial period.

28. The method of claim 27, further comprising:
sending a message to the cellular phone notifying the user of the availability of the enhanced functionality for a fee following expiration of the trial period.

29. (Canceled).

30. The method of claim 28, further comprising:
upon the user subscribing to the enhanced functionality prior to the expiration of the trial period, sending another digital key to the cellular phone to activate the enhanced functionality beyond the trial period.

31. The method of claim 27, further comprising:

displaying an advertisement on the cellular phone notifying the user of the availability of the enhanced functionality for a fee following expiration of the trial period, wherein the advertisement is stored locally within the cellular phone and is displayed independently of any remotely-transmitted messages.

Claims 32-45. (Canceled).

46. The cellular phone of claim 1, wherein the first state is the deactivated state and the second state is the activated state.

47. The cellular phone of claim 1, wherein toggling from the second state to the first state is accomplished by receiving through the wireless transceiver circuit a second key that was sent by a remote source to that cellular phone.

APPENDIX B

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

APPENDIX C

No related proceedings are referenced in II. above, hence copies of decisions in related proceedings are not provided.